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BUILDING MATERIALS & METHODS

P U P I L W O R K B O O K 6

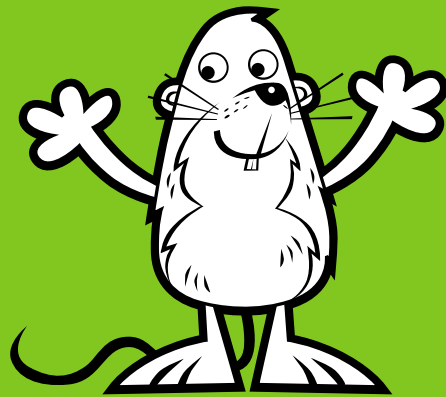


WHAT YOU'RE GOING TO FIND OUT.

You're going to discover what was used to build your stretch of canal. You will also find out the methods and styles of building that were used by the people who engineered and built the canals.



First look at identification poster 6 and get to know the building methods which were used a lot in the past.



WHAT WILL YOU NEED?

- identification poster 6
- this pupil workbook
- clipboards, pencils and rubbers
- wax crayons and extra paper
- magnifiers
- recording forms
- metre rule
- identification guides
- camera, if possible

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Activity 1:
What's it made of and why?

Most of the materials the canal builders used 200 years ago were found locally. Stone, bricks and tiles were heavy and difficult to transport by horse and cart.

This meant that in different parts of the country, the materials used to build canals were different and reflected the sorts of stone and clay that were available in the local area.

Do you think the costs of transporting building materials is still as important today as it was 200 years ago?

☐ Yes ☐ No Why?

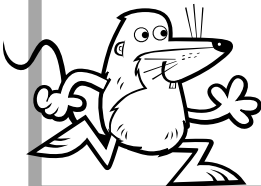
Choose a structure to look at.

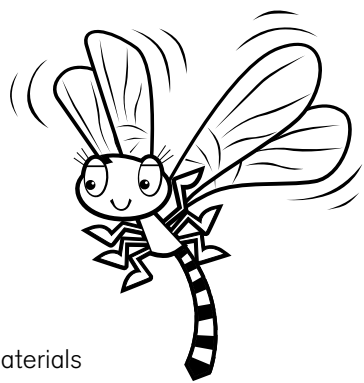
(e.g. a bridge, a wall, a lock or a building).

CANAL
GRID REFERENCE
BUILDING/STRUCTURE

Draw a picture of your structure

1
SCRIBBLE PAD





- ① How many different types of building materials can you see in your structure?
- ② Look at the list below – can you identify the materials in your structure?

BUILDING MATERIAL	TICK if you can see it	WHICH PART OF BUILDING / STRUCTURE (if known)
Stone		
Brick		
Concrete		
Wood		
Stone tiles		
Clay tiles		
Slates		
Plastic		
Metal		
Mortar		
Rendering		
Other		

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PLANTS ON BUILDINGS

Plants can look very pretty growing up walls and provide a good habitat for mini-beasts.

However, some large plants or those with strong roots can cause damage to a wall over a long period of time. In this case the plants may have to be removed.

Can you see any plants growing on the structure?
(circle the right answer)

Yes No

What materials are the plants growing on?
(Remind yourself of the names by looking at the form on the previous page, if you need to).

Where are most plants growing on the structure? Why might this be?

LOOK CLOSER

- ① Choose up to three materials to study in more detail from your structure.
 - ② Fill in their names on the recording form.
 - ③ Use a magnifier to look closely at the materials.
- ④ Make a rubbing or use photography to record the materials you are looking at.
 - ⑤ Now answer the following questions about your materials. Tick the boxes that apply:

	1	2	3
BUILDING MATERIAL			
Colour			
Texture			
smooth			
rough			

Turn onto the next page to
record more information



Design

plain
decorative
attractive
ugly

1	2	3

Manufacture

Do you think it is hand-made or machine-made?

hand-made
machine-made
Explain why you think so

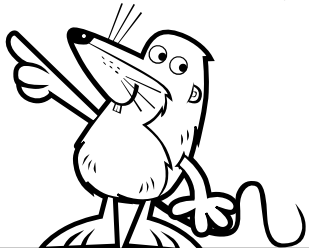
Cost to produce?

expensive
cheap

Where do you think it comes from?

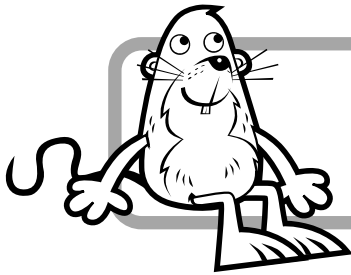
near here
somewhere else

SCRIBBLE PAD 2



Activity 2:
How's it built?

Over time, both materials and the ways in which structures are built fall in and out of fashion. This may be for a variety of reasons e.g. changes in technology, changes in people's attitudes and the cost of raw materials.



People have different ways of building things. This can be because of their local customs and traditions or because of the materials they can find around them where they live.



LOOKING AT STONE

Stone and bricks are two of the most common building materials you will come across. You are going to look at the ways in which stone and bricks have been used to build structures on your stretch of waterway.

- ① Walk along your stretch of the canal and look for structures made out of stone, if there are any.
- ② Look carefully at the identification poster which shows a range of different styles of building using stone and brick.
- ③ Use this to help you answer the questions below.

STONE BUILDING
STYLE

Random rubble

uncoursed
coursed
dry rubble

Squared rubble

uncoursed
coursed
dry rubble
snecked

Ashlar

TICK
if you can see it

WHAT TYPE OF STRUCTURE DID YOU SEE IT ON?
e.g. bridge, lock-keeper's cottage, factory, hut, shelter.

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LOOKING AT BRICKS

- ① Find a structure made out of bricks.

② Write its name in the first column in the recording form below.
- ③ There are different ways of building with bricks that make interesting patterns. Look at the identification poster to work out what way of building has been used in your structure. Write this down in the last column

④ Now find some other structures made out of bricks and do the same for them.

BUILDING / STRUCTURE
give name of building/structure

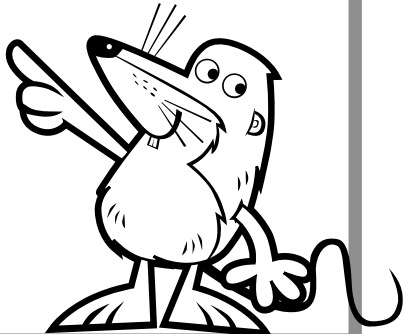
WAY OF BUILDING WITH BRICK
see identification poster 6

- ① Draw some different brick patterns you find on a piece of paper.

② Identify each pattern using identification poster 6 and write the name under each one.
- ③ You might like to take a rubbing from the brickwork to take back with you, or take photos.

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Activity 3:
Canal gear

There are lots of smaller structures and features along our canals which give a waterway its local character - windows, doors, chimneys on buildings and canal ‘furniture’ such as milestones and posts, bollards and mooring rings.

- ① At the canal, find a number of different small features along the canal – such as signs, seats, bollards, stiles, gates and lamp posts.

② Make sketches of them on paper or take photographs of them.
- ③ Compare an old feature with its modern replacement, for example an old and modern lamp post. Make a sketch or photograph of each. Look at the differences and similarities of design and the materials used. Can you explain them?

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